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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Bruce J. Cardinal

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EXAMINER

BAHTA, KIDEST

ART UNIT

PAPER NUMBER

2123

MAIL DATE

DELIVERY MODE

03/16/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/732,911	Applicant(s) CARDINAL ET AL.	
	Examiner KIDEST BAHTA	Art Unit 2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. In view of the Order Returning the Appeal to the examiner filed on 1/15/09, PROSECUTION IS HEREBY REOPENED. A new office action and grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Paul L Rodriguez/

Supervisory Patent Examiner, Art Unit 2123.

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The review of the application by the BPAI has revealed that the case is not ready for docketing as an appeal. Accordingly, the application was returned to the Examiner to address the following matter(s) requiring attention prior to docketing.

I. Final Rejection:

Since the Final Action mailed September 11, 2007 did not address claims 61-63, **the Final Action mailed September 11, 2007, has been withdrawn and new Non-Final Action is issued to include claims 1-67.**

II. Appeal Brief:

A review of the file finds that the grounds of rejection of the claims as provided in the Appeal Brief filed April 26, 2007 under the heading "Grounds of rejection to be reviewed on appeal" is not consistent with the grounds of rejection of claims of record. The grounds of rejection of the claims as provided in the Appeal Brief must be consistent with the Final Rejection mailed September 11, 2006.

Each Grounds of rejection to be reviewed on appeal must be identified. The Final Rejection lists the grounds of rejections as follows:

1. Claims 1, 4, 7-20, 23-29 and 34-60 are rejected under 35 U.S.C. 102(b) as being anticipated by Oliver (U.S. Patent 5,870,302).
2. Claims 2-3, 5-6, 21-22 and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver (U.S. Patent 5,870,302) in view of Peek et al. (U. S. Patent 6,675,098).

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3. Claims 64-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver (U.S. Patent 5,870,302) in view of Goldberg (US 6,647,319).

4. Claims 66-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver (U.S. Patent 5,870,302) in view of Addink et al. (US 2003/0182022).

Whereas Appellants have improperly listed the grounds or rejection as follow:

Claims 1-67 stand rejected under 35 U.S.C. 35 U.S.C. 102(b).

Correction of the Grounds of rejection to be reviewed on appeal for all claims is required.

Based upon the deficiencies pointed out by the BPAI, it was determined that in order to make the record clear, the examiner would vacate the Examiners Answer mailed on August 22, 2007, and withdraw the finality of the office action dated September 11, 2006 and providing applicant with a new non-final office action. This would allow applicant to not only correct the deficient appeal brief filed April 26, 2007 but allow them to review the status of the file.

Claims 1-67 are presented for examination.

Claim Objections

2. Claims 62 and 63 objected to because of the following informalities:

Claims 62 and 63 are identical claims and depended on claim 1, one of the claims need to be to cancel. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 7-20, 23-29, 34-60 and 62-63 are rejected under 35 U.S.C. 102(b) as being anticipated by Oliver (U.S. Patent 5,870,302).

Regarding claims 1 and 59-60, Oliver discloses that receiving landscape and environmental information and deriving an individual station (Fig. 10, Zone A, Zone B and Zone C, i.e., which include site location; column 9, lines 60-67, i.e., each irrigation site 9 or a single watering factor may be *computed for each irrigation site*) irrigation schedule based on the landscape information and the environmental information; and sending the individual station irrigation schedule to an irrigation control unit (Abstract, Fig. 6). In addition, the control irrigation system is receiving and sending information from each (first and second) irrigation site and deriving schedule for each (first and second) irrigation site (Fig. 10, column 13, lines 1-35, i.e., Site A and Site B). Furthermore; Oliver irrigation control system has a computer, which is inherent to have a memory and a processor to receive instruction and execute (column 21, lines 50-56; i.e., An .STO data file stores the current watering schedule for each site computer 1. After the host computer 4 determines when and how much to water, the watering scheduling

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information is then passed to the site computer 1. The site computer 1 then uses this new information for the watering schedule).

Regarding claims 4, 7-20, 23-29 and 34-58, Oliver discloses the environmental information includes evapotranspiration (ET) information (abstract); the environmental information includes weather information (column 5, lines 56-65); the irrigation schedule includes a restriction on the amount of water used (column 6, lines 25-30); the irrigation schedule includes balancing usage with other sites (column 14, line 52); the irrigation schedule includes accounting for needs of the most demanding plant (column 8, lines 20-28); deriving the irrigation schedule includes selecting an algorithm used for deriving the irrigation schedule from a plurality of algorithms (column 17 and column 18); sending the irrigation schedule to an irrigation control unit is initiated by the irrigation control unit (column 1, lines 15-18); sending the irrigation schedule to an irrigation control unit is initiated by the irrigation control unit and the irrigation control unit uses a pull model to request the irrigation schedule (Fig. 10); in the event that sending the irrigation schedule fails, further comprising providing an alert (column 9, lines 60-67); performing irrigation using stored irrigation schedule on the irrigation control unit (column 10, lines 22-25); uploading meter data from the irrigation control unit to a central control (column 8, lines 30-37), the landscape information includes irrigation method (column 1, lines 15-20), precipitation rate (column 3, lines 10-15), distribution uniformity (column 14, lines 9-10); root depth of plant (column 5, line 45), and number of emitters per plant and flow rate of emitter (column 9, lines 66-65), sun exposure information (Fig. 4); plant coefficient by month (column 8, line 65-column 9, line 4); the irrigation schedule is optimized for one or more stations (column 4, lines 5-8; column 15, line 35); multiple stations operating simultaneously (Fig. 6); the

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irrigation schedule is derived using station flow rates and maximum allowable system flow (column 15, lines 16-19) and automatically adjusted for rainfall (column 2, lines 50-53); deriving the irrigation schedule includes minimizing runoff (column 1, lines 55); the irrigation schedule includes hourly restrictions (column 7, lines 20-21); the irrigation schedule includes non-watering days (column 7, lines 8-15); deriving the irrigation schedule includes accounting for the priority of stations (column 11, lines 51-61); landscape information includes seasonality of plants (column 5, lines 45); the irrigation schedule is derived using station flow rates provided by a flow sensor (column 8, lines 30-32); the irrigation schedule is optimized to fit within a user-defined water window (column 1, lines 39-55); the irrigation schedule includes individual station schedules derived using a plurality of algorithms and selecting an algorithm based on an irrigation method and geographic location (column 7, lines 16-30, column 17-18).

Regarding claims 62-63, Oliver discloses there are a plurality of individual station irrigation schedules accessible via a web interface, the first user has a first access privilege to the plurality of individual irrigation schedules via the web interface, and the second user has a second access privilege to the plurality of individual irrigation schedules via the web interface (Figs. 6; 9-10, column 9, lines 40-59; column 13, lines 5-10).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3, 5-6, 21-22 and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver (U.S. Patent 5,870,302) in view of Peek et al. (U. S. Patent 6,675,098).

Regarding claims 2-3, 5-6, 20-21 and 30-33, Oliver discloses the limitations of claim 1 as stated in Par. 2, however Oliver fails to disclose the limitations of claims 2-3, 5-6, 20-21 and 30-33, which is the irrigation schedule is sent to the irrigation control unit via network and Internet. In addition the information of the irrigation is view via Web interface. Peak discloses the irrigation schedule is sent to the irrigation control unit via network and Internet (Fig. 14, Fig. 16 and Fig. 17) and in addition, the information of the irrigation is view via Web (Fig. 14, element 388, i.e., server system).

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify the teachings of Oliver with the teachings Peek in order to provide the easy and fast communication.

5. Claims 64-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver (U.S. Patent 5,870,302) in view of Goldberg (US 6,647,319).

Regarding claims 64-65, Oliver discloses the limitations of claim1 as stated in Par. 2, but Oliver fails to disclose the limitations of claims 64 and 65. Goldberg discloses the limitations of claims 64 and 65 in Fig. 1-2, column 4, line 50- column 5, line 33; "For manual watering, pushbutton 28 is pressed once. This immediately starts a watering sequence. Pressing pushbutton 28 again skips to the next station in the sequence. Pressing pushbutton 28 while terminal 22 is energized stops the manual watering. Manual watering may normally cause a single iteration of the stations for ten minutes each. Manual watering cannot be initiated while an automatic cycle is

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in progress. The controller 54 may, for example, default on power-up to ten minutes per station once each day. As in the controller 10, a scrolling of the LEDs 60 through 68 signals the power-on default condition. To change the 5 default condition, button 56 is first pushed to select a station--once for Station 1, twice for Station 2, and so on. Pushing button 56 a fifth time turns the controller 54 off and lights the no-watering LED 60. Any push of button 56 stops the scrolling, and the chosen station's LED repetitively blinks twice, indicating a ten-minute cycle duration. Button 58 can now be pushed one or more times to select the desired cycle length for that station. Successive pressings of button 58 will select 0, 5, 10 15, or 20 minutes. Each selection is confirmed by the repetitive blinking of the pertinent one of LEDs 62-66 with zero to four blinks, respectively.

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify the teachings of Oliver with the teachings Goldberg in order for the clock timer to synchronize with real time.

6. Claims 61 and 66-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver (U.S. Patent 5,870,302) in view of Addink et al. (US 2003/0182022).

Regarding claims 66-67, Oliver discloses the limitations of claim1 as stated in Par. 2, but Oliver fails to disclose the limitations of claims 66-67. Addink discloses the limitations of claims 61 and 66-67 in the abstract and [0029], "An interactive irrigation system exchanges information between an irrigation controller and a host computer, between the irrigation controller and a user, between the user and the host computer, and between the host computer and a third party. The information is preferably exchanged over an Internet communication

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system. The exchanged information includes the following: irrigation scheduling; quantity of water applied to the irrigated area at the user location, which is compared to ET values; warnings to users when potential problems with their irrigation systems are detected; and other irrigation information that is useful to the user or a third party”. In addition, the third party is a water district, this information could be used for billing purposes, monitoring purposes, or for many other uses.

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify the teachings of Oliver with the teachings Addink in order provide remote host computer monitors the operation of the irrigation system, to assist an irrigation user in attaining more efficient irrigation of the irrigated area. What is especially needed are systems and methods in which the remote host computer communicates over the Internet (1) with an irrigation controller at the user's site, (2) with the user, and (3) with a third party.

Response to Arguments

7. Applicant's arguments filed 8/14/06 have been fully considered but they are not persuasive.

Applicant argues that “With respect to independent claims 1, 59, and 60, Oliver describes using historical and/or forecasted meteorological and/or evapotranspiration (ET) data to automatically adjust irrigation schedules at multiple irrigation sites associated with a single host computer. See, e.g., Oliver col. 12, line 66 - col. 13, line 17 & Fig. 10 (single host used to send modified watering factors simultaneously to multiple site controllers). This is not the same as

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deriving respective irrigation schedules for irrigation sites associated with different users, as recited in claims 1, 59, and 60.”

However, Examiner disagrees since that claims 1, 59 and 60, only discloses deriving a first individual station irrigation schedule for the first irrigation site based on the first landscape information and the first environmental information and a second individual station irrigation schedule for the second irrigation site based on the second landscape information and the second environmental information *but not require to have* a multiple host or each irrigation site connected with different host, instead the claims read one host with a number of stations (N1 station , N2 station , N3 stations,...) control a number of irrigation site (n1 irrigation site, n2 irrigation site, n3 irrigation site, . . .), which means a single host can have multiple station and control multiple site, respectively. Oliver discloses such invention, which is one host with many stations or suite to control the schedule of the irrigation site, in column 9, lines 40-50, i.e., *A host computer 4 is designed to collect meteorological data, forecast future weather conditions, and generate future watering schedules for site computers 1. The host computer 4 manages all site computers 1 by saving historical, current, and future watering schedules. A watering schedule can be **independently determined** for each zone 2 and input as data to each site computer 1.*

Regarding new claims 64-67, see rejection above in Par. 5 and 6.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed Kidest Bahta whose telephone number is 571-272-3737.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application information Retrieval IPAIRI system. Status information for published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAG system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kideest Bahta/

Primary Examiner, Art Unit 2123

/Paul L Rodriguez/

Supervisory Patent Examiner, Art Unit 2123